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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/016,604

DATE: 09/18/2002

TIME: 09:54:41

Input Set : A:\SEQUENCE LISTING.ST25.txt
 Output Set: N:\CRF4\09182002\J016604.raw

3 <110> APPLICANT: Garcia, Pablo D
 4 Hardy, Stephen F
 5 Escobedo, Jaime
 6 Williams, Lewis T
 8 <120> TITLE OF INVENTION: ENDOGENOUS RETROVIRUSES UP-REGULATED IN PROSTATE CANCER
 10 <130> FILE REFERENCE: 002441.00008
 12 <140> CURRENT APPLICATION NUMBER: 10/016,604
 C--> 13 <141> CURRENT FILING DATE: 2002-09-10
 15 <150> PRIOR APPLICATION NUMBER: 6,0251,830
 16 <151> PRIOR FILING DATE: 2000-12-07
 18 <160> NUMBER OF SEQ ID NOS: 225
 20 <170> SOFTWARE: PatentIn version 3.1
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 89
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Homo sapiens
 27 <400> SEQUENCE: 1
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 29 caggtgtta gggcaaccc acccctaca 89
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 33 <211> LENGTH: 560
 34 <212> TYPE: DNA
 35 <213> ORGANISM: Homo sapiens
 37 <400> SEQUENCE: 2
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 39 aggagactcc attttgttat gtactaagaaa aaattcttct gccttgagat tctgttaatc 120
 40 tatgacccctta ccccccaaccc cgtgctctct gaaacatgtg ctgtgtccac tcagggtaa 180
 41 atggattaag ggcgggtgcag gatgtgtttt gttaaacaga tgcttgaagg cagcatgctc 240
 42 cttaagagtc atcaccactc cctaatctca agtaccagg gacacaaaaaa ctgcggagg 300
 43 ccgcaggac ctctgcctag gaaaggccagg tattgtccaa cgtttctccc catgtatag 360
 44 cctgaaatat ggcctcggtt gaaaggaaaag acctgaccgt cccccagccc gacacccgta 420
 45 aagggtctgt gctgaggagg attagaaaaa gaggaaggaa tgccttgc agttgagaca 480
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 51 <211> LENGTH: 319
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 57 gtaaaagact gagatgttta tggatgtatgc tatctaaaag cacagcactt aatctttac 120
 58 attgtctatg atgcaaaagac ctttggcac atgtttgtct gctgaccctc tccccacaat 180
 59 tgtcttgcg ccctgacaca tcccccttt cgagaaacac ccacagatga tcagtaata 240

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66	<212> TYPE: DNA	
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71	gtaaaAGCAct gagatgttA tggTgtatgCA tatctaaaAG cacAGCActT aatCCTttAC	120
72	attgtctatG atgcaAAAGAC ctttGttcAC atgtttgtCT gctgaccCtC tcccacaAT	180
73	tgtcttGtGA ccctgacaca tcccccttCt cgagAAACAC ccacAGatGA tcagtaaATA	240
74	ctaaaggAAC tcagaggCtG gcgggatCCT ccataTGctG aacgctggTT ccccggtCC	300
75	ccttcttCt ttctctatac ttgtctctG tggTctttC ttttccAAat ctctcgTccc	360
76	accttacgAG aaacacCCAC aggtgtgtAG gggcaacCCCA cccctaca	408
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86	aggagactCC attttGttat gtactaAGAA aaatttCttCt gccttGAGat tctGttAatC	120
87	tatgacCtta cccccAAACCC cgtgctCtCt gaaACatGtG ctgtgtCCAC tcaggGttAA	180
88	atggattaAG ggcgggtGcAg gatgtgtCttt gttaAAACAGA tgcttGAGg cAGCATGtC	240
89	cttaAGAGtC atcaccAACTC cctaAtCtCA agtACCCAGG gACACAAAAA ctgcggAAAGG	300
90	ccgcaggGAc ctctgCCTAG gaaAGCCAGG tattGtCCAA ctGtttCtCC catgtatAG	360
91	cctgaaataAt ggcctcgTgg gaAGGGAAAG acctgaccGT cccccAGCCc gacACCCGta	420
92	aagggtctgt gctgaggAGG attAGtAAAGA gAGGAAGGAA tgcctcttGc agttGAGACa	480
93	agAGGAAGGc atctgtctCC tgcctgtCCc tggGcaatGG aatgtctCgg tataAAACCC	540
94	gattgtatGc tccatctact gagatAGGGAA AAAACCGCCT tagggCtGGA ggtgggACCT	600
95	gcgggCAGCA atactgttt gtaAAAGCAct gagatGttA tggTgtatGCA tatctAAAAG	660
96	cacAGCActT aatCCTttAC attgtctatG atgcaAAAGAC ctttGttcAC atgtttgtCT	720
97	gctgaccCtC tccccacaAt tggTcttGtGA ccctgacaca tcccccttCt cgagAAACAC	780
98	ccacAGatGA tcagtaaATA ctaaggAAC tcagaggCtG gcgggatCCT ccataTGctG	840
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105	<213> ORGANISM: Homo sapiens	
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109	aggacaAGtC gacGAGAGat cccgAGtaca tctacAGtCA gccttACG	108
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120	taAGAACtK attGATTCC attGcycatG gaaATAGACT tactcTTat GactGGGAAA	180

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121	ttttggccaa atcttccctt tcatcctctc agtatctaca gtttaaaaacc tggtggattg	240
122	atggrgtaca rgaacaggta cgaaaaaaatc aggctactaa gcccactgtt aatatagacg	300
123	cagaccaatt gtaggaaca ggtccaaatt ggagcaccat taaccaacaa tcagtgatgc	360
124	agaatgaggc tattgaacaa gtaagggcta tttgcctcag ggcctgggaa aaaattcagg	420
125	acccaggaac agcttccctt attaattcaa ttagacaagg ctctaaagag ccatatcctg	480
126	actttgtggc aagattacaa gatgctgctc aaaagtctat tacagatgac aatgcccga	540
127	aagttattgt agaattaatg gcctatgaaa atgcaaattc agaatgtcag tcggccataa	600
128	agccattaaa aggaaaagtt ccagcaggag ttgatgtaat tacmgaatat gtgaaggctt	660
129	gtgatggat tggaggagct atgcataagg caatgctaat ggctcaagca atgagggggc	720
130	tcactctagg aggacaagtt agaacatttg ggaaaaaaatg ttataattgt ggtcaaatcg	780
131	gtcatckgaa aaggagttgc ccaggcttaa ayaarcagaa tataataaat caagctatta	840
132	cagcaaaaaa taaaaagcca tctggcctgt gtccaaaatg tggaaaagca aaacattggg	900
133	ccaatcaatg tcattctaaa tttgataaaag atggcaacc attgtctgga aacaggaaga	960
134	ggggccagcc tcaggccccca caacaaactg gggcattccc agttaaactg tttttccctc	1020
135	agggtttca aggacaacaa cccctacaga aaataccacc acttcaggaa gtcaagccaat	1080
136	tacaacaatc caacagctgt cccgcgccac agcaggcagc accgcagtag atttatgttc	1140
137	cacccaaatg gtcttttac tccctggaaa gccccccacaa aagattocta gaggggtata	1200
138	tggcccgctg ccagaaggga gggtaggcct ttgagggaga tcaagtctaa atttgaaggg	1260
139	agtccaaatt catactgggg taatttactc agattataaa ggggaaatc agtagtgat	1320
140	cagctccact gttcccccga gtgccaatcc aggtgataga attgctcaat tactgcttt	1380
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152	tgaggctgaa aaaaatyyaa aaagaaaagg aatagggcat cttttttagg agcggtcact	180
153	gtagagcctc caaaaacccat tccattaact tggaaaaaaa amaaactgtat ggtaaatcag	240
154	cagccgcttc caaaaacaaa rctggaggcyy ttacayttat tagcaaagaa acmattagaa	300
155	aaaggacatt gagccttcat ttgccttgc gaattctgtt tgtrattcag aaaaaatccg	360
156	gcagatggcg tatgctaact gagccattaa tgcgttaatt caacccatgg gggctctccc	420
157	accccggttgc ccctctccag ccatggtccc cttaattat aattgatctg aaggattgct	480
158	tttttaccat tcctctggca aaacaggatt ttgaraaatt tgctttagg acaccagcct	540
159	aaataataaa gaaccagcca ccaggtttca gtggaaagta ttgcctcagg gaatgcttaa	600
160	tagtcaact atttgcagc tcaagctctg caaccagtt gagacaagtt ttcaagactgt	660
161	tacatcggtc actatgttga tattttgtgt gctgcagaaa cgagagacaa attaattgac	720
162	cgttacacat ttctgcagac agaggttgcc aacgcgggrc tgacaataac atctgataag	780
163	attcaarcct ctactccctt ccgttacttg ggaatgcagg tagagggaaag gaaaattaaa	840
164	ccmcaaaaaa atagaaaataa gaaaagacac attaaaagca ttaaatgagt ttcaaaagtt	900
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166	ctacttatgc catgtcaaat ttgtwctctt tcttaagagg ggactcgaa ttaaatagtg	1020
167	aaagaacgtt aactccagag gcaactaaag aaattaaatt aattgaagaa aaaattcggt	1080
168	cagcacaagt aaatagaata gatcacttgg ccccaactcca aattttgatt ttactactg	1140
169	cacattccct aacaggcatc attgttcaaa acacagatct tggatggatgg tccctccctc	1200
170	ctcacagtagc aattaagact ttacattgtt acttggatca aatggctaca ttaattggtc	1260
171	agggaaagatt atgaataata acattgtgt gaaatgaccc agataaaatc actgttccctt	1320
172	tcaacaagca acaggttaga caagccttta tcaattctgg tgcattggcag attggcttt	1380

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177	<211> LENGTH: 1420	
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183	aatcatgact aaaatggat agctccctaa aaaggggacta ggaaagaaaag aagtcccaat	120
184	tgaggctgaa aaaaatyyaaa aaagaaaaagg aatagggcat cctttttagg agcggtcact	180
185	gtagagcctc caaaacccat tccattaact tggggggaaaa aaaaamaact gtatggtaaa	240
186	tcagcagccg cttccaaaac aaaarctgga ggcyyttacay ttattagcaa agaaacmatt	300
187	agaaaaaagga cattgagcct tcattttcgc ctttggattc tgtttgrat tcagaaaaaaa	360
188	tccggcagat ggcgtatgct aactgagcca ttaatgccgt aattcaaccc atgggggctc	420
189	tcccaccccg gttccctct ccagccatgg tccctttaa ttataattga tctgaaggat	480
190	tgcttttta ccatttctct ggcggaaaacag gattttgara aatttgcattt yaccacacca	540
191	gcctaaataaa taaagaacca gccaccagg ttcagtggaa agtattgcct cagggaaatgc	600
192	ttaatagttc aactatttgt cagctcaagc tctgcaacca gtttagagaca agttttcaga	660
193	ctgttacatc gttcaactatg ttgatatttt gtgtgctgca gaaacgagag acaaattaat	720
194	tgaccgttac acatttctgc agacagagg tgcggaaacgcg ggrctgacaa taacatctga	780
195	taagattcaa rcctctactc ctttccgtt ctttggaaatg caggttagagg aaaggaaaat	840
196	taaaccmcaa aaaaatagaa ataagaaaaag acacattaaa agcattaaat gagtttcaaa	900
197	agttgctagg agataactaat tggatttggaa gatattaaatt ggatttggcc aactcttaggc	960
198	attcctactt atgccatgtc aaatttgcgtc tctttttttt gggggactc ggaattaaat	1020
199	agtgaaagaa cgttaactcc agaggcaact aaagaaaatta aattaattga agaaaaaaatt	1080
200	cggtcagcac aagtaaatag aatagatcac ttggccccac tccaaattttt gattttact	1140
201	actgcacatt cccttaacagg catcattttt caaaacacag atcttgcgtt gtggcccttc	1200
202	cttcctcaca gtacaattaa gacttttaca ttgtacttgg atcaaatggc tacattaatt	1260
203	ggtcaggaa gattatgaat aataacatgg tggaaatgg accccagataa aatcaatgtt	1320
204	ccttcaaca agcaacagg tagacaagcc tttatcaatt ctggcgtatg gcagattgg	1380
205	cttggccatt ttgtggaaat tattgacaat cgttaccaca	1420
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215	gtcattacag tggtaacaag attttatca gtctattaaac attgtatccat attctgcata	120
216	tgtatcgtt gctacaaagg atattggatgg agcccttaatc aaatacatta tggatgtatca	180
217	gttaaaccgg ctgtttaattt tggtacaaca aaatgttggaa aaawgaaatt tcccattttta	240
218	tattactcat attcgagcac acactaattt accagggctt ttaactaaag caaatgaaca	300
219	agctgacttg ctgtatcat ctgcattttt kgargcaca gaacttcatg ctttgactca	360
220	tgttaaatgcata ataggattaa aaaatattttt tgatattcaca tggaaacaga caaaaaat	420
221	tgtacaacat tgcrcccatgt gtcagattctt acacctggcc actcaggagg yaagagttaa	480
222	tcccagaggat ctatgttca atgtgtttagt gcaaatggat gtcatgcacg taccytcatt	540
223	tggaaaattt tcattttgtcc ayytgacagt tgatattttt tcacatttca tatgggcaac	600
224	ctgcccagaca ggagaaaatgtt cttccatgtt yaagagacat ttattatytgtt gttttccctgt	660
225	catggggatgtt ccagaaaaaaatgtt ttaaracaga caatggccca ggttactgtt gtaaaggcgt	720
226	tcaaraatttca taaaatcgtt gggaaaattttt acatataataa ggaattctct ataattccca	780
227	aggacaggcc ataattgaaa gaactaataatg aacactcaaa gctcaattgg taaaaca	837

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232 <212> TYPE: DNA
233 <213> ORGANISM: Homo sapiens
235 <220> FEATURE:
236 <221> NAME/KEY: misc_feature
237 <222> LOCATION: (1)..(841)
238 <223> OTHER INFORMATION: N=A,G,C,T
240 <400> SEQUENCE: 11
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242 tgaaaatgtt aaaagatata aaggaaggag ttaaacaata tggatccaaac tccccttata 120
243 taagaacagt attagattcc attgctcatg gaaatagact tactccttat gactgggaaa 180
244 ttttggccaa atcttccctt tcatcctctc agtatctaca gtttaaaaacc tggggattg 240
W--> 245 atggagtaca agaacaggta cgnaaaaat caggctacta agcccactgt taatataagac 300
246 gcagaccaat tgtaggaac aggtccaaat tggagcacca ttaaccaaca atcagtgtat 360
247 cagaatgagg ctattgaaca agtaagggtt atttgcctca gggcctgggg aaaaattcag 420
248 gacccaggaa cagcttccc tattaattca attagacaag gctctaaaga gccatatcct 480
249 gactttgtgg caagattaca agatgctgtca caaaagtcta ttacagatga caatgcccga 540
250 aaagttattt tagaattaat ggcctatgaa aatgcaatc cagaatgtca gtcggccata 600
251 aagccattaa aaggaaaagt tccagcagga gttgtatgtaa ttacagaata tgtgaaggct 660
252 tgtgtatgggaa ttggaggagc tatgcataaag gcaatgctaa tggctcaagc aatgaggggg 720
253 ctcactctag gaggacaagt tagaacattt gggaaaaat gttataattt tggctcaatc 780
254 ggtcatctga aaaggagttt cccaggctta aataaacaaga atataataaa tcaagctatt 840
255 a
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259 <211> LENGTH: 924
260 <212> TYPE: DNA
261 <213> ORGANISM: Homo sapiens
263 <220> FEATURE:
264 <221> NAME/KEY: misc_feature
265 <222> LOCATION: (1)..(924)
266 <223> OTHER INFORMATION: N=A,G,C,T
268 <400> SEQUENCE: 12
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W--> 270 agcctccaaa acccattcca ttaacttggg naaaaaana actgtatgtt aaatcagcag 120
W--> 271 ncgttccaa aacaaaanct ggaggcntta canttattag caaagaacc attagaaaaa 180
272 ggacatttggag ctttcatttt cgccttggaa ttctgtttgt aattcagaaa aaatccggca 240
273 gatggcgtat gctaacttggag ccattaaatgc cgtaattcaa cccatggggg ctctcccacc 300
274 cccgttgcctc tctccagcca tgggtccctt taattataat tgatctgaag gattgctttt 360
275 ttaccattcc tctggcaaaa caggattttt aaaaatttgc ttttaccaca ccagcctaaa 420
276 taataaagaa ccagccacca gtttcagtg gaaagtattt cctcaggaa tgcttaatag 480
277 ttcaacttatt tgcagctca agctctgcaa ccagtttagag acaagtttc agactgttac 540
278 atcgttcact atgttgatatttttgc tgcagaaacga gagacaattt aattgaccgt 600
279 tacacatttc tgcagacaga gtttgcacac gcccactga caataacatc tgataagatt 660
280 caaacctcta ctccttccg ttacttgggaa atgcaggtag agggaaagaa aattaaacca 720
281 caaaaaataa gaaataaagaa aagacacatt aaaagcattt aatgagtttca aaaaagggtt 780
282 aggagatact aattggattt ggagatattt attggatttgc gccaactcta ggcattccta 840
W--> 283 cttatgccat gtcaaatttgc tntctttct taagaggaa ctcggatata aatagtgaaa 900
284 gaacgttaac tccagaggca acta 924

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; N Pos. 263
Seq#:12; N Pos. 1,13,91,99,121,138,147,153,862
Seq#:27; N Pos. 25,700
Seq#:28; N Pos. 24,25,27,668
Seq#:29; N Pos. 22,23
Seq#:30; N Pos. 1,19,38,247,265,301,309,316,382,401,453,569,575,632,664
Seq#:31; N Pos. 1,743
Seq#:32; N Pos. 1,2,3,4,5,7,308,358,555,556,569,580,637,658,679
Seq#:33; N Pos. 19
Seq#:34; N Pos. 3,587,641,678,686,691,692,693,694,695,696,697,699,700,701
Seq#:34; N Pos. 702,703,704,705,706,707,716,718,719,721,722,723
Seq#:36; N Pos. 719,773
Seq#:37; N Pos. 22,31,32,33,36,38,53,54,61,64,74,77,99,141,298,328,585,626
Seq#:37; N Pos. 635,667,669,675,690,708
Seq#:38; N Pos. 79,385,453,454,455,476,480,481,500,503,515,531,538,543,546
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Seq#:38; N Pos. 601,604,605,609,612,613,625,626,629,633,639,643,644,646,647
Seq#:38; N Pos. 649,651,655,657,658,667,672
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Seq#:41; N Pos. 1
Seq#:46; Xaa Pos. 92,96,113,121,124,147,150,154,159,175,188,210,220,228,246
Seq#:46; Xaa Pos. 254
Seq#:48; Xaa Pos. 376,408,416,418,427,438,439
Seq#:49; Xaa Pos. 125,132,153,187,197,205,223,231
Seq#:50; Xaa Pos. 12,25
Seq#:51; Xaa Pos. 12,25
Seq#:52; Xaa Pos. 25
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Seq#:54; Xaa Pos. 12,25
Seq#:55; Xaa Pos. 12,25
Seq#:108; Xaa Pos. 917
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Seq#:157; N Pos. 23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41
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Seq#:157; N Pos. 126,154,156,157,158,159,160,161,162,163,164,165,166,167
Seq#:157; N Pos. 168,169,171,187,198,199,235,238,260,285,290,291,292,293
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Seq#:157; N Pos. 1061,1062,1066,1068,1071,1072,1077,1080,1084,1092,1098

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